FIG. 1

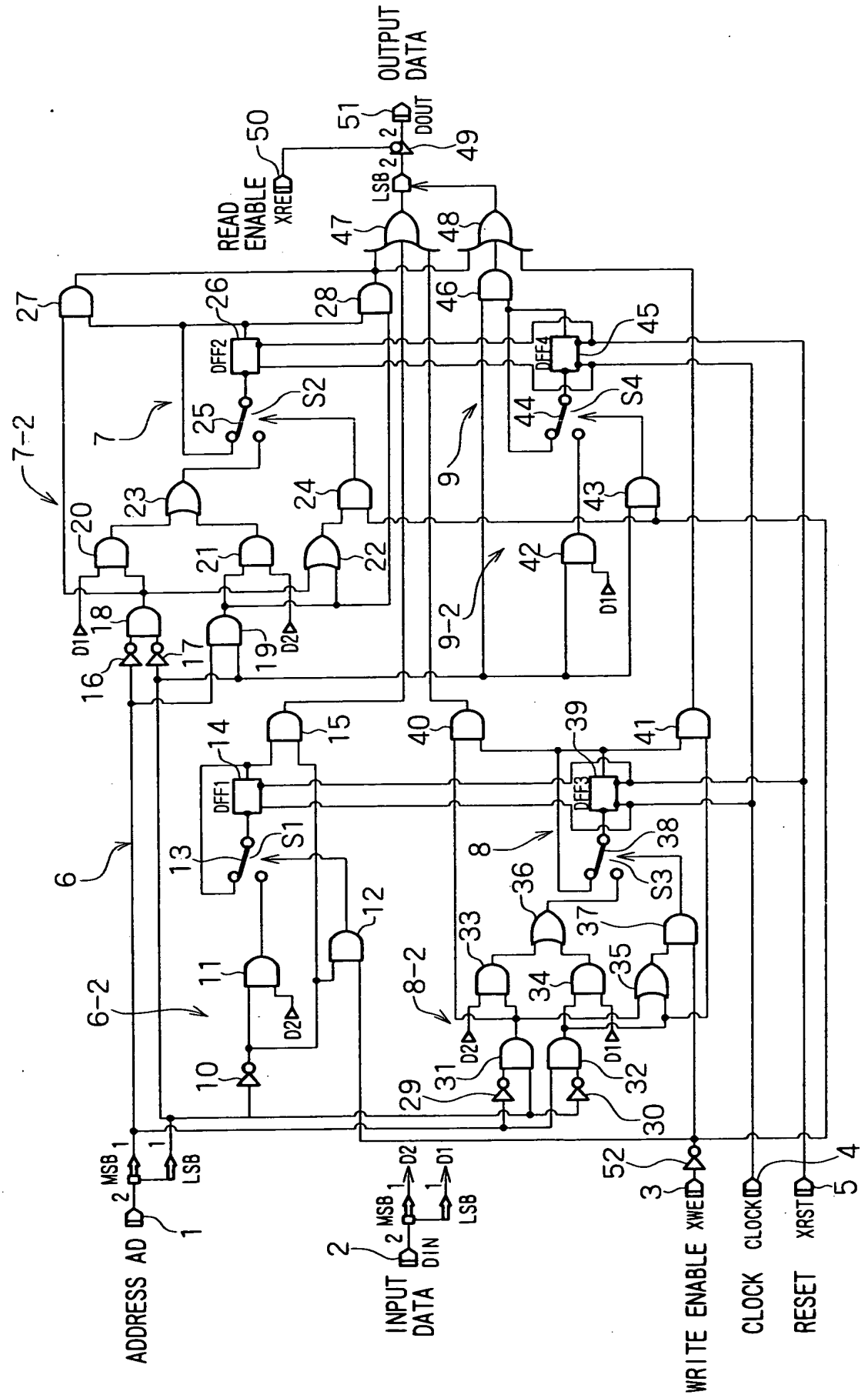

ADDRESS AD
INPUT DATA DIN
WRITE ENABLE XWE
CLOCK CLOCK
RESET XRST
READ ENABLE XRE
OUTPUT DATA DOUT
MSB
LSB
D1
D2
DFF1
DFF2
DFF3
DFF4
S1
S2
S3
S4
6
6-2
7
7-2
8
8-2
9
9-2

FIG. 2

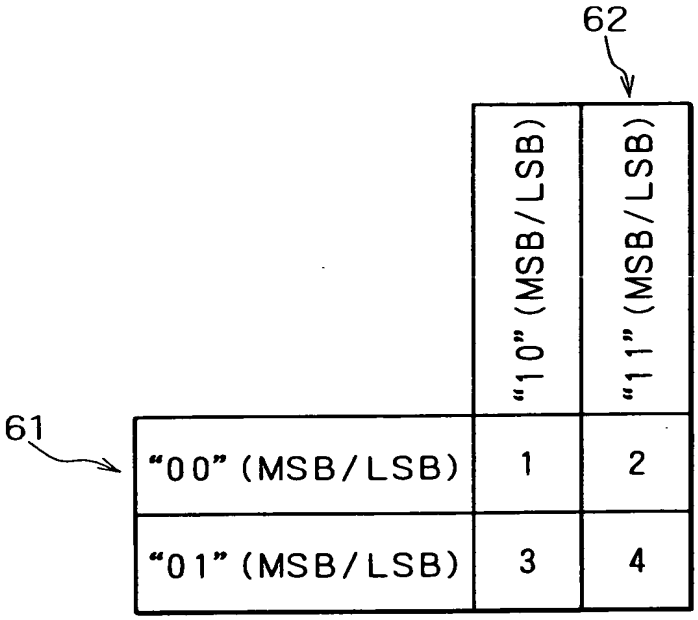
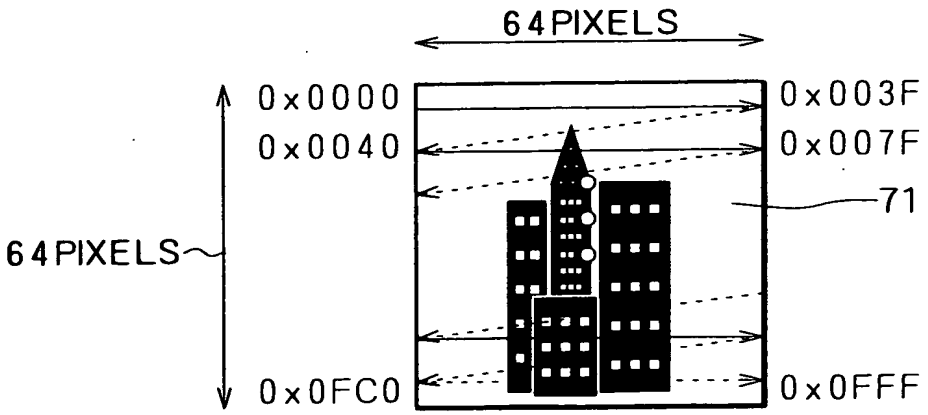
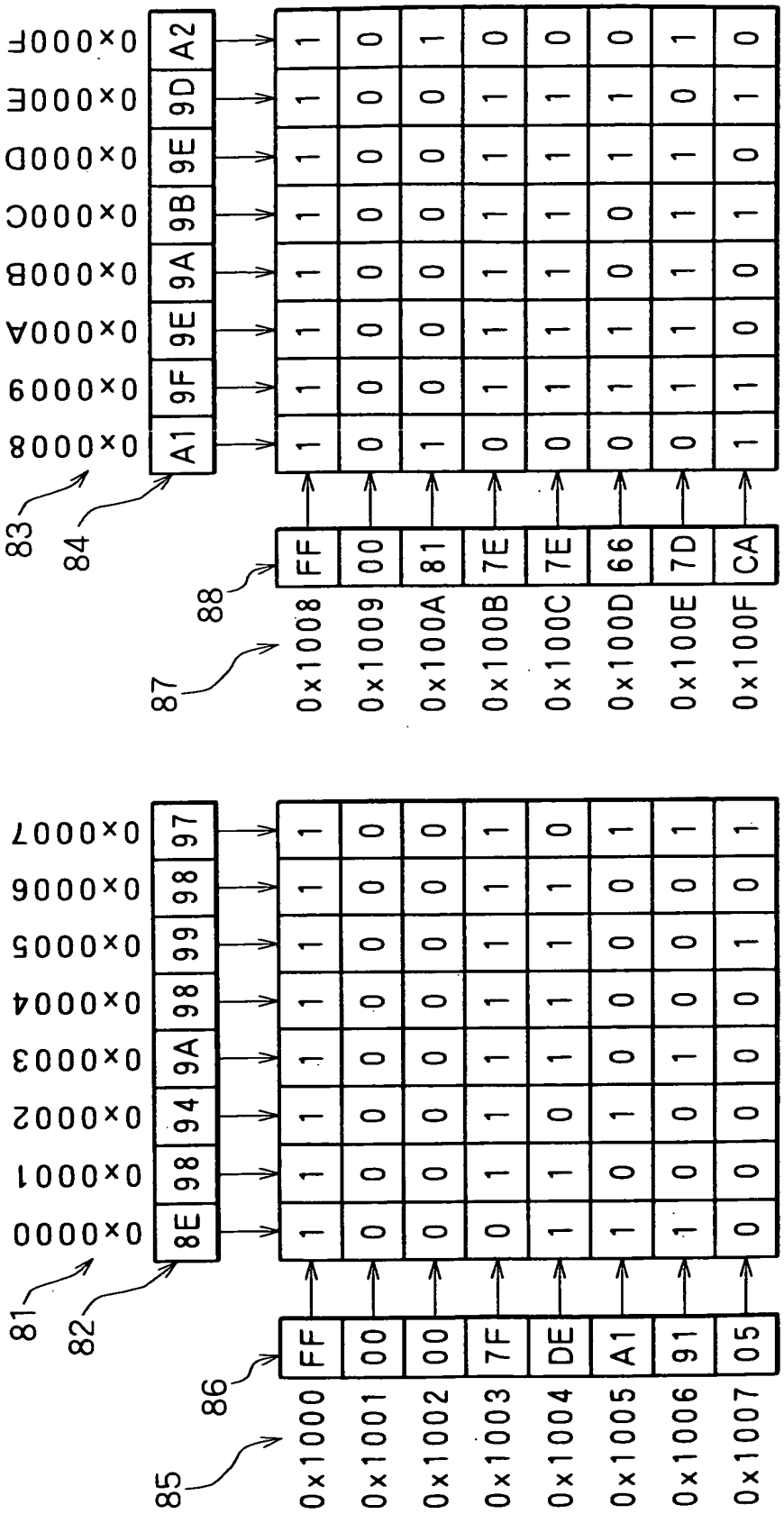

62
"10" (MSB/LSB)
"11" (MSB/LSB)
61
"00" (MSB/LSB)
1
2
"01" (MSB/LSB)
3
4

FIG. 3


64PIXELS
0x0000
0x003F
0x0040
0x007F
71
64PIXELS
0x0FC0
0x0FFF

EP 1 271 560 A2

FIG. 4



EP 0 742 520 A2

FIG. 5

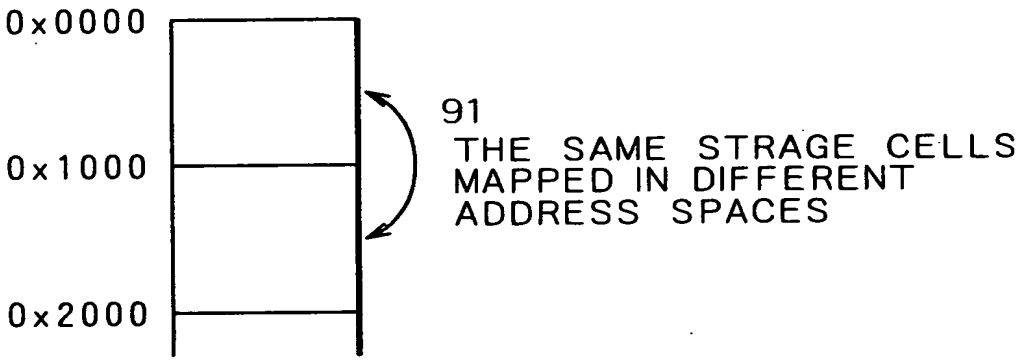


FIG. 6

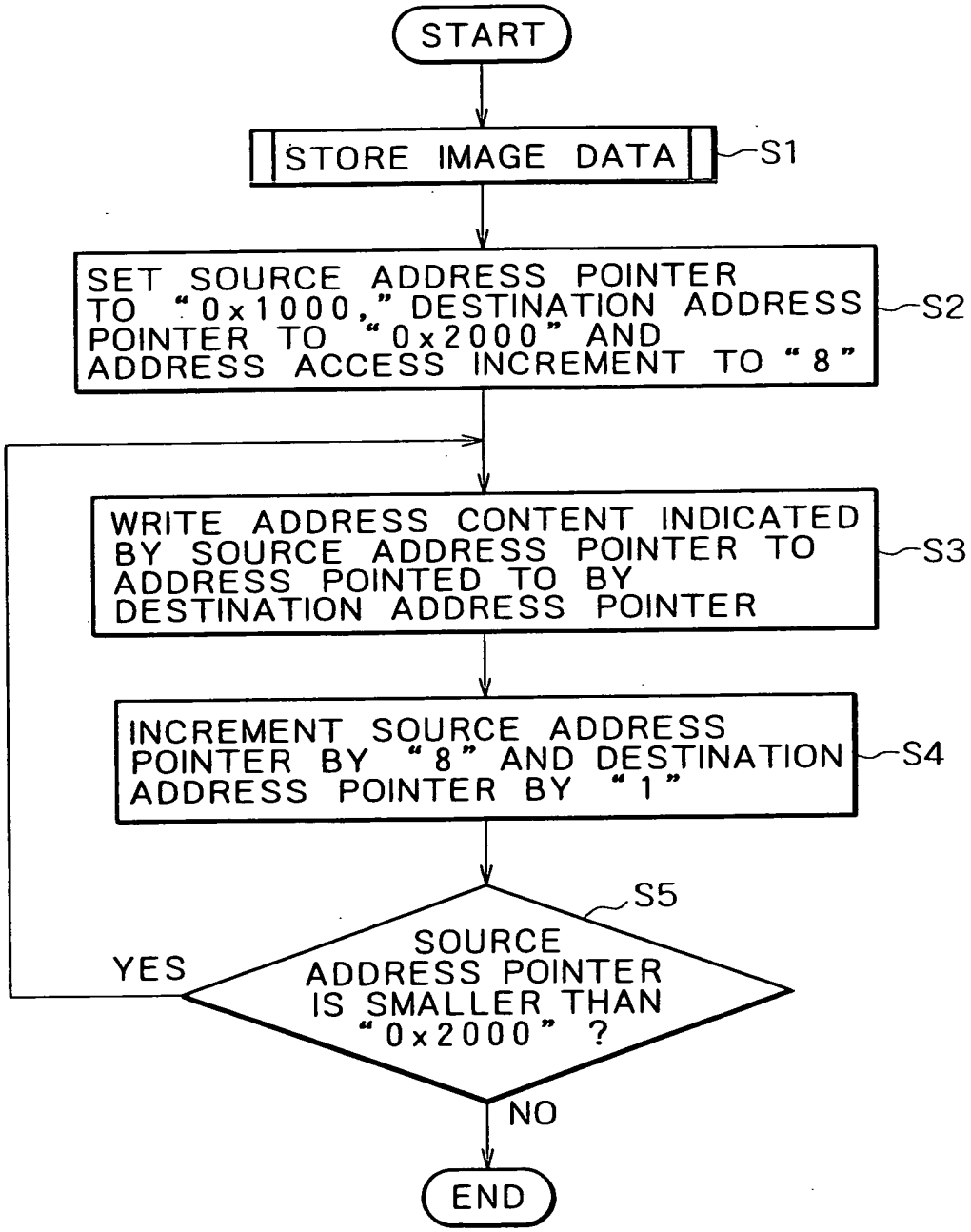

START
STORE IMAGE DATA
S1
SET SOURCE ADDRESS POINTER TO "0x1000," DESTINATION ADDRESS POINTER TO "0x2000" AND ADDRESS ACCESS INCREMENT TO "8"
S2
WRITE ADDRESS CONTENT INDICATED BY SOURCE ADDRESS POINTER TO ADDRESS POINTED TO BY DESTINATION ADDRESS POINTER
S3
INCREMENT SOURCE ADDRESS POINTER BY "8" AND DESTINATION ADDRESS POINTER BY "1"
S4
S5
SOURCE ADDRESS POINTER IS SMALLER THAN "0x2000" ?
YES
NO
END

FIG. 7

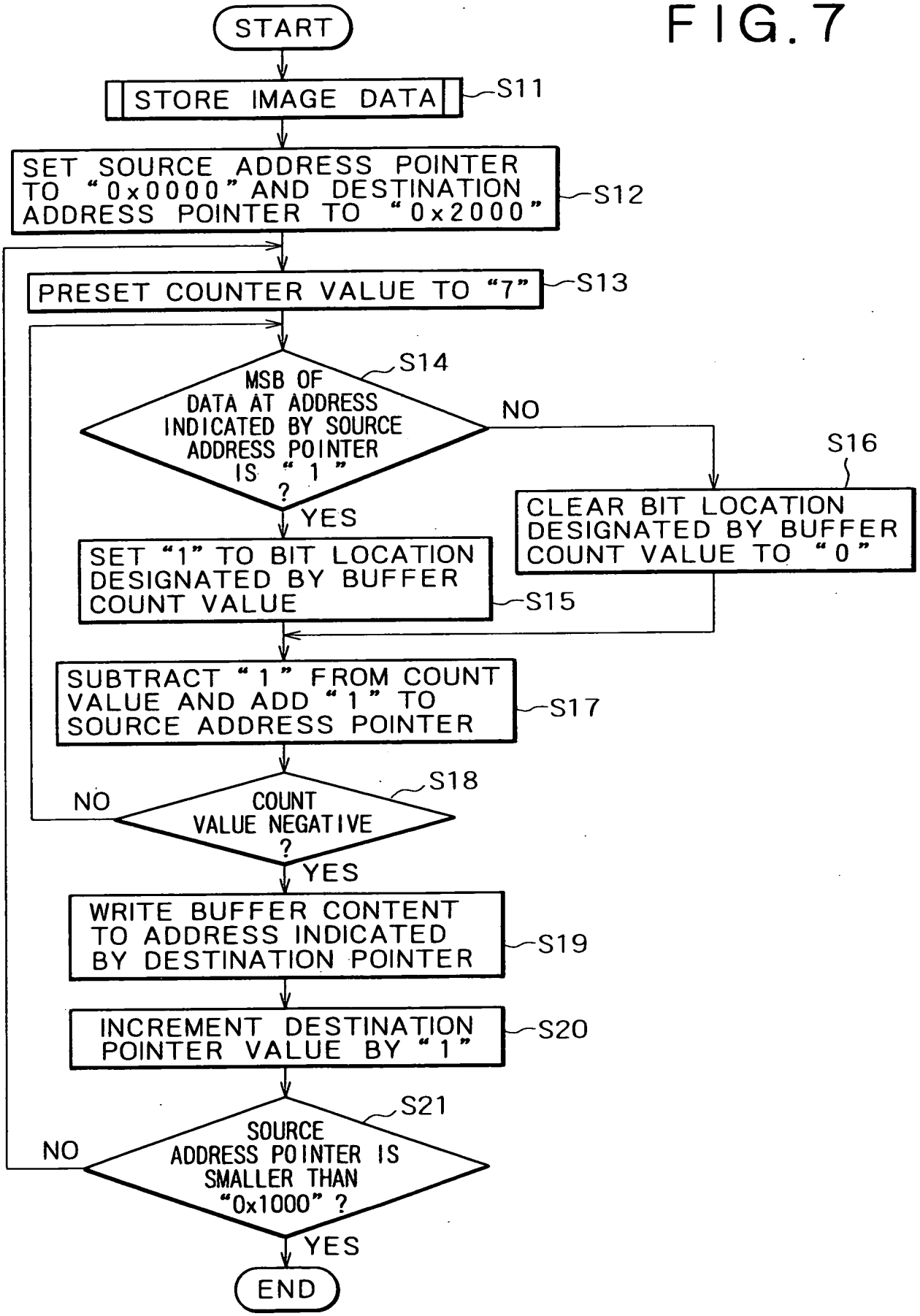

START
STORE IMAGE DATA
S11
SET SOURCE ADDRESS POINTER TO "0x0000" AND DESTINATION ADDRESS POINTER TO "0x2000"
S12
PRESET COUNTER VALUE TO "7"
S13
MSB OF DATA AT ADDRESS INDICATED BY SOURCE ADDRESS POINTER IS "1" ?
S14
NO
YES
SET "1" TO BIT LOCATION DESIGNATED BY BUFFER COUNT VALUE
S15
CLEAR BIT LOCATION DESIGNATED BY BUFFER COUNT VALUE TO "0"
S16
SUBTRACT "1" FROM COUNT VALUE AND ADD "1" TO SOURCE ADDRESS POINTER
S17
COUNT VALUE NEGATIVE ?
S18
NO
YES
WRITE BUFFER CONTENT TO ADDRESS INDICATED BY DESTINATION POINTER
S19
INCREMENT DESTINATION POINTER VALUE BY "1"
S20
SOURCE ADDRESS POINTER IS SMALLER THAN "0x1000" ?
S21
NO
YES
END

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FIG. 8

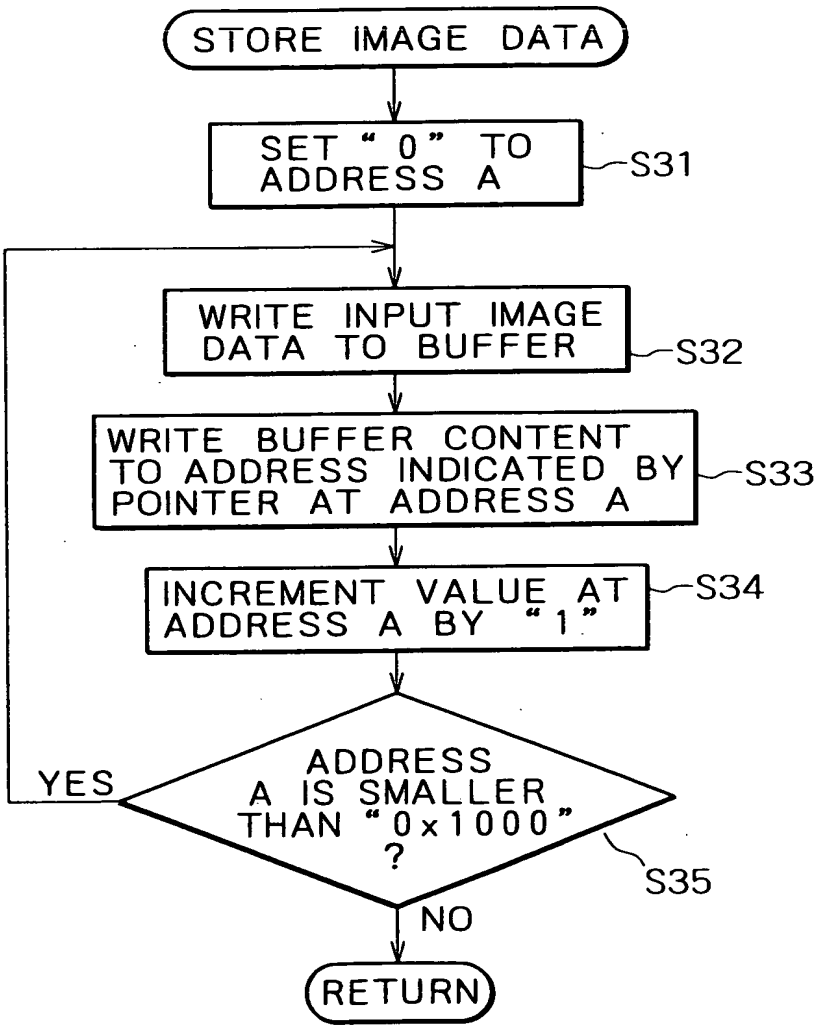


FIG. 9A

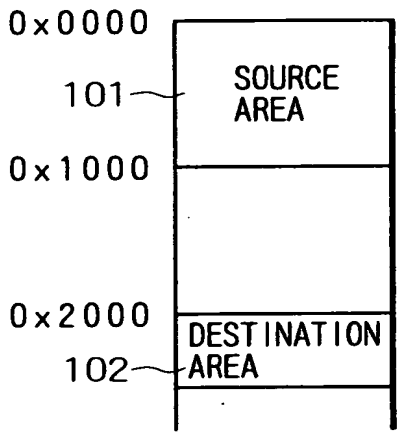
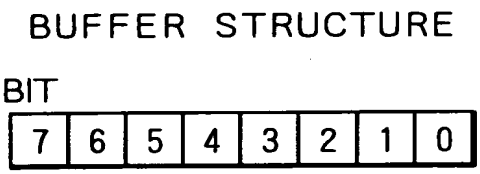


IMAGE DATA AREAS
0x0000
101
SOURCE AREA
0x1000
0x2000
DESTINATION AREA
102

FIG. 9B


BUFFER STRUCTURE
BIT
7
6
5
4
3
2
1
0